

PDHD Keepup Plans

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Introduction

Admission: Keepup has been a non-starter up to this point

- Last minute changes to processing chain
- Newly exposed bugs/features
 - I.e. Current Wirecell implementation sometimes pads TPC waveforms with 0s → Interferes with 2D deconvolution (because you're messing with the time series) → Many extra hits → Hit disambiguation combinatorics blow up etc.
 - Leads to errantly-long run times (20hrs or more!)
- Need to finish debugging/implementing new functionality before keepup can begin in earnest
- Also still waiting on several LArSoft PRs

Processing Goals

Before we realized the extent of various issues:

- Wanted a preliminary calibration sample on data to reiterate various selection cuts (i.e. bragg peak ID) on uncalibrated dQ/dx
- Wanted to see performance of updated beam reconstruction (APA 1 bias issues)

Both were going to be unofficial because we were waiting on software integration before we could make a release of software

- Beam reco sample written to my scratch area
- Calibration sample written to RSEs with month-long rule
 - Would clean up before official sample production

Preliminary Numbers – Calibration

Memory: Jobs are comfortably under requested limit of 3999MB

Runtime: 2.5-4hrs (When things go right)

Output size:

- Reco files: 700MB
- NTuples: 40MB